The following is a complete set of the claims for this patent application, replacing all prior versions.

Claims:

Claim 1 (currently amended): An alloy carbon steel comprising iron and a maximum of 0.35% by weight of carbon, said alloy carbon steel having a triple-phase microstructure comprising ferrite crystals fused with martensite-austenite crystals, said crystals having grain sizes within the range of about 2 microns to about 100 microns, said martensite-austenite crystals comprising laths of martensite alternating with thin films of austenite, said martensite-austenite crystals ~~austenite and~~ constituting from about 5% to about 95% by weight of said triple-phase microstructure, and said martensite-austenite crystals devoid of carbide precipitates at interfaces between phases.

Claims 2-3 (canceled)

Claim 4 (original): An alloy carbon steel in accordance with claim 1 in which said martensite-austenite crystals constitute from about 15% to about 60% by weight of said triple-phase microstructure.

Claim 5 (original): An alloy carbon steel in accordance with claim 1 in which said martensite-austenite crystals constitute from about 20% to about 40% by weight of said triple-phase microstructure.

Claim 6 (original): An alloy carbon steel in accordance with claim 1 in which said carbon constitutes from about 0.01% to about 0.35% by weight of said triple-phase microstructure.

Claim 7 (original): An alloy carbon steel in accordance with claim 1 in which said carbon constitutes from about 0.03% to about 0.3% by weight of said triple-phase microstructure.

Claim 8 (original): An alloy carbon steel in accordance with claim 1 in which said carbon constitutes from about 0.05% to about 0.2% by weight of said triple-phase microstructure.

Claim 9 (original): An alloy carbon steel in accordance with claim 1 further comprising silicon at a concentration of from about 0.1% to about 3% by weight of said alloy composition.

Claim 10 (original): An alloy carbon steel in accordance with claim 1 further comprising silicon at a concentration of from about 1% to about 2.5% by weight of said alloy composition.

Claim 11 (original): An alloy carbon steel in accordance with claim 1 in which said carbon constitutes from about 0.03% to about 0.3% by weight of said triple-phase microstructure, said alloy carbon steel further comprising silicon at a concentration of from about 0.1% to about 3% by weight of said alloy composition.

Claim 12 (original): An alloy carbon steel in accordance with claim 1 in which said carbon constitutes from about 0.05% to about 0.2% by weight of said triple-phase microstructure, said alloy carbon steel further comprising silicon at a concentration of from about 1% to about 2.5% by weight of said alloy composition, and containing substantially no carbides.

Claims 13-22 (withdrawn)

Claim 23 (new): An alloy carbon steel in accordance with claim 1 in which grain sizes are within the range of about 5 microns to about 30 microns.